

THE GENUS MELECTA IN EASTERN NORTH
AMERICA AND PORTO RICO (HYMEN-
OPTERA, ANTHOPHORIDÆ)

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In 1939¹ the writer commented on the remarkable fact that the genus *Melecta*, known by some twenty or more species and subspecies in western North America, was unknown east of the Mississippi River. This situation posed a very difficult problem in distribution since no good explanation for the apparent fact was evident. It is with considerable satisfaction, therefore, that the writer is now able to record the presence of at least one species on the Atlantic Coast of North America and another in Porto Rico. The presence of the former, a species assignable to the subgenus *Melecta* s. str. in Georgia suggests the possibility that the group may yet prove to be fairly widely distributed in eastern North America, since this subgenus clearly appears to be of northern origin. The occurrence of a species of the subgenus *Melectomorpha* in Porto Rico is even more significant, suggesting that this latter group may be of southern origin and, if so, probably entitled to generic rank. A need for revisional studies of Neotropical melectine bees is clearly indicated and must be undertaken before the distribution of the North American forms can become fully intelligible.

***Melecta (Melecta) atlantica* Linsley, new species**

FEMALE: Form robust; integument black, pubescence black except that of dorsum of thorax which is ochraceous. *Head* with face densely clothed with long, erect, black hairs, sparser on clypeus and vertex; upper vertex and occipital area with a patch of erect, pale hairs; upper frons dullish, except sutures, closely, moderately coarsely punctate; clypeus shining, moderately coarsely punctured at base, more finely toward apex which has a smooth impunctate margin; labrum with surface concave, shining, coarsely, irregularly punctured with finer punctures intermixed, irregularly clothed with coarse, erect black hairs; antennæ black, first flagellar segment longer than second

¹ Linsley, E. G. 1939. A revision of the Nearctic Melectinæ. *Ann. Ent. Soc. Am.*, 32: 429-468, 9 figs.

segment; mandibles with a distinct inner tooth. *Thorax* densely clothed with long, erect hairs, those of pronotum, mesoscutum, mesoseutellum, metanotum and propodeum ochraceous, the latter area with some black hairs at side; pubescence obscuring punctation; mesoscutellar lobes acute or armed with a short tooth; mesepisterna more or less opaque, coarsely closely punctate, pubescence dense but not completely obscuring surface. *Wings* lightly infuscated; marginal cell rounded at apex. *Legs* black, clothed with black pubescence, especially long and dense on posterior faces of femora and tibiæ; inner ramus of intermediate and posterior tarsal claws long, slender. *Abdomen* moderately shining, finely punctured, clothed with black pubescence, long and erect on basal declivity, short, depressed on posterior of first tergite and over most of second tergite, longer, suberect on tergites three, four and five, fifth tergite with a broad, smooth, median impunctate area at apex; pygidial plate long, slender, liguliform, apex narrowly rounded; sternites clothed over most of basal half with long, coarse, suberect black hairs. Length 13 mm. anterior wing 10 mm.

Holotype: female (collection of P. W. Fattig), from Kennesaw Mt., Georgia, April 26, 1936, collected by P. W. Fattig, to whom I am indebted for the privilege of studying the specimen.

This species may be distinguished at once from all other known North American species of *Melecta* s. str. by the absence of erect pale hairs from the first abdominal tergite, the dense apical abdominal pubescence, and the long, slender pygidial plate. Superficially it resembles *Melecta (Melectomimus) edwardsii* Cresson but may be separated by the very short scutellar spines and narrow pygidial plate. It is also suggestive of *Anthophora abrupta* (Say), with which it may be confused in collections. This is the only known species of *Melecta* s. str. from east of the Mississippi River.

***Melecta (Melectomorpha) pentalon* (Dewitz), n. comb.**

Crocisa pentalon Dewitz, 1881, Berl. Ent. Zeitschr., 25: 198, pl. 5, fig. 2.

FEMALE: Form elongate; color black, with patches of whitish or brownish pubescence on the head, thorax and abdomen. *Head* with long, depressed white pubescence at middle and sides of face and upper cheeks behind apex of eyes, lower cheeks and area immediately above antennal bases clothed with long dark brownish pubescence; vertex opaque, closely punctate; antennæ with first flagellar segment longer than second; clypeus subglabrous,

closely punctured, interspaces shining; mandibles with inner margin bidentate. *Thorax* sparsely pubescent; mesoscutum with a narrow, median, longitudinal band of appressed white hairs and a small oval patch on each side of middle at level of anterior margin of tegulæ, surface closely punctate, interspaces shining; tegulæ rufo-piceous; mesoscutellum strongly biconvex, dorsal lobes prominent, acute, surface punctured similarly to mesoscutum, median line with a band of appressed white pubescence. *Wings* tinted with fuscous, cellular area pale. *Legs* reddish, with irregular patches of appressed, plumose white pubescence. *Abdomen* black, dull, tergites three and four with a broad, irregular, smooth apical margin; first tergite with an arcuate band of appressed white pubescence along lateral and latero-apical margin, widely broken at middle, second tergite with a similar but a little less extensive band, third tergite with apical band reduced to a small, barely transverse patch on each side of middle; pygidial plate rather broadly triangular, dull; sternites shining, finely punctate, polished apical margin very wide at middle on sternites three, four and five, punctate area clothed with appressed white hairs. Length 11 mm., anterior wing 9 mm.

Redescribed from a specimen collected at Lares, Porto Rico, Nov. 3, 1922 (Sein), and kindly submitted for identification by Dr. Krombein of the Bureau of Entomology and Plant Quarantine, Washington, D. C.

This species is more slender than any of the other known members of the subgenus *Melectomorpha* but otherwise seems to agree well. It may perhaps be best compared with *M. (M.) interrupta* Cresson from Texas from which it differs in the prominent, acute mesoscutellar lobes, paler wings, and arrangement of the pubescent pattern of the head and thorax.

***Melecta (Melectomorpha) californica* Cresson**

Mr. W. R. Enns has very kindly submitted for study specimens that I am unable to separate from *M. (M.) californica californica* Cresson. These were reared from nests of *Anthophora abrupta* (Say) along the bank of the Mississippi River, Cape Girardeau, Mo., June 1, 1942. This record provides the easternmost extension of the range of this species and its subgenus on the North American continent.